WHAT IS CLAIMED IS

1. A device of wave frequency calibration for remote controller, comprising:

   an oscillator for generating a base wave;

   a storage for storing a match value;

   a modifier for generating a modified signal; and

   a processor connected to the oscillator, the storage and the modifier, when the modified signal is not received by the processor, the processor will calculate the number of variation of the potential of the base wave so as to generate a count value, and once the count value is the same as the match value, the potential of the wave is changed, moreover, when the processor receives the modified signal, the processor will keep altering the match value until the modified signal disappear and thereafter store the updated match value into the storage.

2. The device of wave frequency calibration for remote controller as cited in claim 1, wherein the oscillator can be an oscillator of less accuracy.

3. The device of wave frequency calibration for remote controller as cited in claim 2, wherein the oscillator can be a resistor-capacitor type oscillator (RC oscillator).

4. The device of wave frequency calibration for remote controller as cited in claim 1, wherein the modifier can be one of the buttons on the remote controller that the modified signal is generated when the button is pressed and held.

5. The device of wave frequency calibration for remote controller as cited in claim 4, wherein the button can be released to stop the modified signal.

6. The device of wave frequency calibration for remote controller as cited in claim 1, wherein the processor can follow a specific sequence to change the match value.

7. The device of wave frequency calibration for remote controller as cited in claim 1, wherein the period of the wave is a multiple of the period of

the base wave.

8. The device of wave frequency calibration for remote controller as cited in claim 1, wherein the maximum error of the period of the wave is the half period of the base wave.

9. A method of wave frequency calibration for remote controller, comprising the following steps:

   (a) checking whether a modified signal is received, if yes, performing step (b); otherwise, performing step (f);

   (b) changing the match value and generating a wave for carrying a control instruction according to the changed match value;

   (c) delaying a period of time;

   (d) checking whether the modified signal is released, if yes, performing step (e); otherwise, performing the step (b);

   (e) storing the match value into the storage;

   (f) loading the match value from the storage;

   (g) calculating the number of variation of the potential so as to generate a count value;

   (h) checking whether the count value is equal to the match value, if yes, performing step (i); otherwise, performing the step (g);

   (i) changing the potential of a wave, and resetting the count value and then performing the step (g).

10. The method of wave frequency calibration for remote controller as cited in claim 9, wherein the step (a) can be a step of pressing and holding one of the button on the remote controller.

11. The method of wave frequency calibration for remote controller as cited in claim 10, wherein the step (d) can be a step of releasing the button.

12. The method of wave frequency calibration for remote controller as cited in claim 9, wherein the step (b) can be a step of changing the match value based on a specific series.

13. The method of wave frequency calibration for remote controller as cited in claim 9, wherein the period of the wave is a multiple of the period of

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the base wave.

14. The method of wave frequency calibration for remote controller as cited in claim 9, wherein the maximum error of the period of the wave is the half period of the base wave.

5 15. The method of wave frequency calibration for remote controller as cited in claim 9, wherein the method can be implemented by one of the following: software, hardware and firmware.

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